

NCCN Guidelines Compliance Report

produced by ClinixBoost LLC

NCCN Compliance Summary

Compliance Status: Fully Compliant

NCCN Category: 2A

Reference: Report based on NCCN Guideline for Colon Cancer that can be found at https://www.nccn.org/professionals/physician_gls/pdf/colon.pdf

Overall Rationale: The pending XELOX (CAPEOX) regimen consisting of capecitabine 500 mg PO BID D1-D14 and oxaliplatin 135 mg IV q21d is fully compliant with NCCN guidelines for colon cancer. The patient has stage IV colon cancer arising from the cecum with unresectable synchronous liver metastasis, pMMR/MSS status, and KRAS G12D mutation. CAPEOX is a Category 2A recommended regimen for initial/primary treatment of synchronous unresectable metastases when intensive therapy is recommended. The KRAS G12D mutation appropriately excludes anti-EGFR therapy but does not affect eligibility for CAPEOX. The capecitabine dose reduction due to DPYD intermediate activity is a clinically appropriate pharmacogenomic-guided modification consistent with safe prescribing practices. The plan to add bevacizumab (Avastin) after port placement is also consistent with NCCN-recommended CAPEOX + Bevacizumab (COL11), further supporting the overall treatment strategy.

Patient Demographics

The patient is a 61-year-old Female with a height of Not specified, weight of Not specified, and body surface area (BSA) of Not specified.

Primary Diagnosis

The patient has been diagnosed with Colon Cancer, classified under Colon Cancer, with histological subtype of Ulcerative colitis-associated adenocarcinoma.

Biomarkers

MSI: Stable (MSS) (MSI stable tumors generally do not respond to immunotherapy) [Actionable]; TMB: Low (Low TMB suggests limited benefit from immunotherapy) [Actionable]; PDL1: Negative (PDL1 negative suggests limited benefit from PD-1/PD-L1 inhibitors) [Actionable]; KRAS: Positive - G12D mutation (KRAS G12D mutation indicates resistance to anti-EGFR therapy) [Actionable]; DPYD: Intermediate activity (Intermediate DPYD activity likely caused severe side effects with fluoropyrimidine-based chemotherapy, requiring dose reduction) [Actionable]; CEA: 14 (Rising CEA prompted resumption of Xelox and Avastin) [Actionable].

Performance Status

ECOG performance status: Not reported. Karnofsky performance score: Not reported. Functional notes: Patient is doing okay per subjective report.

Pending/Planned Regimens

XELOX (Chemotherapy).

Palliative Care

Palliative care services have not been formally engaged for this patient.

Alternative Regimens

Planned Treatment: XELOX

Table Legend:

- **Agent** - The chemotherapy or targeted therapy drug name.
- **Order Template** - The standardized order protocol name used in the clinical system.
- **NCCN Category** - The NCCN guideline recommendation category (e.g., Category 1, 2A, 2B, 3).
- **Rationale** - Clinical reasoning for why this alternative is appropriate based on patient factors and evidence.

Agent	Order Template	NCCN Category	Rationale
Bevacizumab + Capecitabine + Oxaliplatin	COL11 - CAPEOX (Capecitabine/OXALIplatin) + Bevacizumab	2A	This patient has stage IV pMMR/MSS colon cancer with unresectable synchronous liver metastasis requiring intensive first-line therapy. CAPEOX + Bevacizumab is NCCN-recommended for synchronous unresectable metastases and is the same backbone regimen (CAPEOX) the patient is already receiving, with the addition of bevacizumab. The clinical note confirms the plan to add Avastin once the port is healed, making this the intended next step.
Fluorouracil + Leucovorin + Oxaliplatin	COL2 - Modified FOLFOX6 (Leucovorin/Fluorouracil/OXALIplatin)	2A	FOLFOX is an NCCN-recommended intensive first-line regimen for pMMR/MSS stage IV colon cancer with synchronous unresectable metastases. It is a preferred oxaliplatin-based alternative to CAPEOX. However, given this patient's DPYD intermediate activity, IV fluorouracil dosing would also require careful dose adjustment, similar to the capecitabine modifications already in place.
Fluorouracil + Leucovorin + Oxaliplatin + Bevacizumab	COL16 - Modified FOLFOX6 (Leucovorin/Fluorouracil/OXALIplatin) + Bevacizumab	2A	FOLFOX + Bevacizumab is NCCN-recommended as first-line intensive therapy for pMMR/MSS metastatic colon cancer with synchronous unresectable metastases. It is a therapeutically equivalent alternative combining an oxaliplatin-based backbone with anti-VEGF therapy. DPYD intermediate activity would necessitate fluorouracil dose reduction.

Agent	Order Template	NCCN Category	Rationale
Fluorouracil + Leucovorin + Irinotecan	COL28 - FOLFIRI (Leucovorin/Fluorouracil/Irinotecan)	2A	FOLFIRI is NCCN-recommended as first-line intensive therapy for pMMR/MSS metastatic colon cancer with synchronous unresectable metastases. It provides an irinotecan-based alternative for patients who may not tolerate oxaliplatin. Fluorouracil dose adjustment would be needed due to DPYD intermediate activity.
Fluorouracil + Leucovorin + Irinotecan + Bevacizumab	COL14 - FOLFIRI (Leucovorin/Fluorouracil/Irinotecan) + Bevacizumab	2A	FOLFIRI + Bevacizumab is NCCN-recommended as first-line intensive therapy for pMMR/MSS metastatic colon cancer with synchronous unresectable metastases. Bevacizumab is the preferred anti-angiogenic agent. This is a valid irinotecan-based alternative. DPYD intermediate activity requires fluorouracil dose modification.
Fluorouracil + Leucovorin + Irinotecan + Oxaliplatin	COL87 - FOLFIRINOX (Leucovorin/Fluorouracil/Irinotecan/OXALIPLATIN)	2A	FOLFIRINOX is NCCN-recommended for first-line intensive therapy of pMMR/MSS metastatic colon cancer, strongly considered for patients with excellent performance status. It combines all active agents. However, given this patient's DPYD intermediate activity and prior severe toxicity with fluoropyrimidines, this aggressive regimen may carry higher toxicity risk.
Capecitabine	COL4 - Capecitabine	2A	Single-agent capecitabine is NCCN-recommended for pMMR/MSS metastatic colon cancer when intensive therapy is not recommended. This is a less intensive alternative appropriate if the patient's functional status or tolerance does not support combination therapy. The patient has already been on single-agent Xeloda previously.
Capecitabine + Bevacizumab	COL42 - Capecitabine + Bevacizumab	2A	Capecitabine + Bevacizumab is NCCN-recommended for pMMR/MSS metastatic colon cancer when intensive therapy is not recommended. This non-intensive alternative adds anti-VEGF therapy to the fluoropyrimidine backbone and may be appropriate if the patient cannot tolerate oxaliplatin.

Disclaimer: ClinixBoost LLC uses advanced generative AI trained on clinical data and trusted guidelines like ClinicalTrials.gov, NCCN and payer drug policies. It supports, but does not replace, clinical judgment. While efforts are made to ensure accuracy, the tool may not account for all patient-specific factors or the latest updates. Clinicians should review AI outputs alongside their own expertise, with final care decisions made by medical professionals.